Notes:
- Grey box = either semester
- = prerequisite; = corequisite
- Students planning to study abroad sophomore 2 should take EK 301 in sophomore 1.
- Students must complete 48 credits of upper-division program coursework (not including Hub or writing).
- See back for Hub Unit Legend

Hub Electives: must include all Hub areas below to fulfill degree requirements
- 1. One unit Philosophical Inquiry & Life’s Meanings
- 2. One unit Aesthetic Exploration
- 3. One unit Historical Consciousness
- 4. One unit Social Inquiry
- 5. One unit Individual & Community
- 6. First unit Global Citizenship & Intercultural Literacy
- 7. Second unit Global Citizenship & Intercultural Literacy
- 8. One unit Ethical Reasoning
- Total of at least 16 credits
REQUIREMENTS

Computer Engineering majors are required to complete a minimum of 133 credits as detailed on the Program Planning Sheet on the other side of this page.

HUB ELECTIVES

All students are required to complete a total of 26 Hub units. Eighteen of these Hub units are included in courses required for the CE BS degree. The remaining eight Hub units must be satisfied through four (or more) Hub Electives that incorporate the following seven Hub areas: Philosophical Inquiry; Aesthetic Exploration; Historical Consciousness; Social Inquiry; Individual in Community; Ethical Reasoning; Global Citizenship & Intercultural Literacy (2X). Lists of courses that fulfill combinations of these Hub units are at: www.bu.edu/eng/current-students/ugrad/requirements/hub-electives/

CORE ELECTIVE

Computer Engineering majors complete two Core Electives from the following list:

ENG EC 401 Signals and Systems
ENG EC 410 Introduction to Electronics
ENG EC 444 Smart & Connected Systems
ENG EC 450 Microprocessors*

COMPUTER ENGINEERING ELECTIVE

Computer Engineering majors complete two Computer Eng Elective courses (8 credits) from the following list:

ENG EC 440 Introduction to Operating Systems
ENG EC 441 Intro to Computer Networking
ENG EC 444 Smart & Connected Systems
ENG EC 447 Software Design
ENG EC 504 Advanced Data Structures
ENG EC 512 Enterp Client-Server Softwr Sys Des
ENG EC 513 Computer Architecture
ENG EC 521 CyberSecurity

EE BREADTH ELECTIVE

Computer Engineering majors complete one EE Breadth Elective course from the following list:

ENG EC 401 Signals and Systems
ENG EC 402 Control Systems
ENG EC 410 Intro to Electronics
ENG EC 412 Analog Electronics
ENG EC 414 Machine Learning
ENG EC 415 Communication Systems
ENG EC 416 Intro Digital Signal Processing*
ENG EC 417 Electric Energy Systems
ENG EC 455 Electromagnetic Systems I
ENG EC 456 Electromagnetic Systems II
ENG EC 471 Physics of Semiconductor Devices
ENG EC 501 Dynamic System Theory
ENG EC 503 Introduction to Learning from Data
ENG EC 505 Stochastic Processes
ENG EC 526 Parallel Prog for High Perf & Big Data
ENG EC 527 High-Perf Prog with Multicore & GPUs
ENG EC 528 Cloud Computing
ENG EC 535 Introduction to Embedded Systems
ENG EC 541 Computer Communications Networks
ENG EC 544 Network Physical World
ENG EC 551 Adv Digital Design w/ Verilog & FPGA
ENG EC 571 Digital VLSI Circuit Design

TECHNICAL ELECTIVES

Computer Engineering majors complete three Technical Elective courses (12 credits):

ENG BE 209 and any ENG EC, BE, EK or ME course at the 300-level or above, except for 600-level courses, are acceptable as Technical Electives.

Pre-Approved Courses Outside Engineering that fulfill a Technical Elective:

CAS AS 414 Solar and Space Physics
CAS CS 440 Intro to Artificial Intelligence
CAS CS 480 Introduction to Computer Graphics
CAS CS 585 Image and Video Computing
CAS MA 511 Introduction to Analysis
CAS MA 528 Introduction to Modern Geometry
CAS MA 531 Computability and Logic
CAS MA 541 Modern Algebra 1
CAS MA 583 Introduction to Stochastic Processes
CAS MA 584 Introduction to Modern Geometry
CAS MA 587 Introduction to Modern Geometry
CAS MA 591 Quantum Physics 1
CAS MA 592 Quantum Physics 2
CAS PY 451 Quantum Physics 1
CAS PY 452 Quantum Physics 2
QST SI 480 The Business of Technology Innovation
QST SI 482 Technology and its Commercialization

Hub Unit Legend:

QR1 = Quantitative Reasoning 1
QR2 = Quantitative Reasoning 2
SI1 = Scientific Reasoning 1
SI2 = Scientific Reasoning 2
FWY = First-Year Writing Seminar
WRI = Writing, Research & Inquiry
OSC = Oral and/or Signed Communication
DME = Digital/Multimedia Expression
CRT = Critical Thinking

Notes:

For each of the following sets of courses, only one course can be taken for credit in each set due to the overlap of material:

(1) ENG ME 403, ENG ME 404, ENG BE 402*, ENG EC 402, ENG BE 404
(2) ENG ME 303, ENG BE 436
(3) ENG EK 102*, ENG EK 103, CAS MA 142, CAS MA 242
(4) ENG BE 401*, ENG BE 403, ENG EC 401
(5) ENG ME 366, ENG EC 381*, ENG EK 381, ENG BE 200*
(6) ENG ME 460, ENG ME 560
(7) ENG EK 156*, ENG ME 358
(8) ENG ME 357, ENG ME 359*

*indicates course no longer offered.